

Attorney Docket No.
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PATENT APPLICATION
Serial No. 10/715,430

AMENDMENTS TO THE DRAWINGS

The Specification was amended to include the reference numerals 602 and 620 in the paragraph at page 9, line 9 so that Figs. 6A and 6B need not be amended.

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REMARKS

Applicants appreciate Examiner's thorough review of the application. Claims 10, 11, 13-15 and 16-35 have been withdrawn to address Examiner's restriction requirements. No new material has been added. Reconsideration of the application is respectfully requested.

To assist in reviewing Applicants' response: where Applicants have quoted Examiner's office action, the quoted material is single-spaced and indented and Applicants' response to Examiner's concerns is in bold print.

Under "Election Restrictions" of the office action, Examiner states:

10 Applicant's election with traverse of Group I, claims 1-15 and the species of one plate/foil, the species of metal, the species of applying pressure, and the species of Fig. 5 in the reply filed on 27 June 2005 is acknowledged.

15 The traversal is on the grounds that using the process of claims 1-15, one can use only the apparatus of claims 16-35 to yield the desired result, i.e., a structure that does not transfer moisture in an undesirable direction.

20 This is not found persuasive because as stated in the restriction requirement, the claimed configuration for implementing a barrier to fluid flow in at least one direction can be made by another and materially different process, such as one in which the adhesive is applied to the non-porous material prior to the placing of the non-porous material upon the first section.

25 The traversal is also on the grounds that examining all of the claimed inventions in claims 1-35 in a single application will not create a serious burden on the USPTO because the same research suffices for both the method claimed and the apparatus and because the applicant has a statutory right to claim an invention as he/she sees fit according to In re Weber, 580 F.2d at 458, 198 USPQ at 332.

30 This is not found persuasive because claims 1-15 are drawn to a method of implementing a barrier to fluid passage in at least one direction which is classified in class 52, subclass 744.1 and claims 10-35 are drawn to a configuration implementing a barrier to fluid passage in at least one direction, classified in class 52, subclass 411, which demonstrates that there is a different search for the method versus the apparatus.

35 The requirement is still deemed proper and is therefore made FINAL.

Claim 16-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no allowable generic or linking claim.

40 Claims 10, 11, and 13-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species (i.e.,

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claims 10, 11, 13, and 14 are drawn to a nonelected species of two plates or foils and claim 15 is drawn to the nonelected species of Fig. 4).

Applicants choose not to comment on the required restriction except to note
5 that Examiner may have mistakenly included the phrase "there being no allowable generic or linking claim" under the comments for Claims 16-35 and it should have been under comments to Claims 10, 11, and 13-15.

Under "Drawings" of the office action, Examiner states:

10 The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the description: reference numerical "602" shown in Fig. 6A and reference numeral "620" shown in Fig. 6B. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the office action to avoid abandonment of the application. Any amendment replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next office action. The objection to the drawings will not be held in abeyance.

25 Applicants have amended the Specification to include a description of the material referenced by reference numerals 602 and 620.

Under "Specification" of the office action, Examiner states:

30 The use of the trademark Goretex® has been noted in this application (on page 4, lines 25 and 28). It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

35 Applicants have capitalized the trademark GORETEX® and included a generic description everywhere the term appears.

Under "Claim Rejections – 35 U.S.C. §112" of the office action, Examiner quotes 35 U.S.C. § 112, 2nd para., and states:

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Claims 1-9 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention.

5 Claim 1, the recitation of "any said panels placed adjacent thereto" in lines 9-10, the recitation of "said panels" in line 11, the recitation of "all said overlapped edges" in line 13, both recitations of "each said panel" in line 15, the recitation of "said panels" in line 17, and the recitation of "said overlapped edges of said panels" in lines 17-18, all lack antecedent basis because a second panel has not been introduced. Therefore, the examiner suggest amending the recitation to read – overlapping an edge of said panel with an edge of a second panel which is placed adjacent to said at least one panel, wherein said panels completely cover said topmost layer of said adhesive material –.

10 15 Claim 1, lines 8-9, the recitation of "said at least one layers of an adhesive material" is confusing and indefinite. For proper antecedent basis it should be at least one – layer – (i.e., not "layers"). Further, the word "an" should be deleted since the "at least one layer of adhesive material" has already been introduced in line 4 and the word "an" makes it appear like you are introducing another adhesive material.

20 25 Claim 1, line 11, the recitation of "said topmost layer of said adhesive material" is confusing and indefinite because in line 4, "at least one layer of adhesive material" has been introduced which the examiner has taken to mean that there is only a single layer of adhesive that has been positively recited. The recitation of a "topmost layer of said adhesive material" is confusing when only one adhesive layer has been positively recited.

30 Claim 1, line 17, the recitation of "a seal" lacks antecedent basis and is confusing because "a seal" has already been introduced in line 13 and it is not clear if the "seal" recited in line 17 is the same as the "seal" in line 13 or a different seal.

35 40 45 Claim 1, lines 17-19, the recitation of "wherein emplacing said panels, establishing a seal between said overlapped edges of said panels, as appropriate, and emplacing said topmost section completes implementation of said barrier" is confusing and indefinite because it is not clear if this is part of the invention or not. If the recitation does form part of the invention then it is suggested that applicant amend the recitation to acknowledge that the steps have already been positively recited and that the recitation of such steps in the wherein clause is referring back to the steps already recited and not adding new steps. Therefore, the examiner suggest amending the wherein clause in lines 17-19 to language such as – wherein said step of emplacing said panels, said step of establishing said seal between said overlapped edges of said panels, as appropriate, and said step of emplacing said topmost section completes implementation of said barrier --. Furthermore, the words "as appropriate" should be deleted as indefinite since it makes it ambiguous as to whether the step of establishing a seal is performed or not.

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5 Claim 2, lines 2-4, recites that "said barrier employs non-porous material selected from the group consisting essentially of: a metal, a metal alloy, a steel alloy, a stainless steel, a composite material, a composite material containing at least some metal, and combinations thereof." This appears to be reciting a Markush group, but reciting the Markush group in an improper manner. The examiner suggests amending the recitation to – said barrier employs non-porous material being any one selected from a group consisting of: a metal, a metal alloy, a steel alloy, a stainless steel, a composite material, a composite material containing at least some metal, and combinations thereof --.

10 Claim 3, line 2, the recitation of "at least in part at least one metal" is confusing and indefinite. The examiner suggests amending the recitation to – at least in part a first metal--.

15 Claim 4, lines 1-2, recites "in which porous material encompassing said barrier comprises at least in part concrete" which is confusing and indefinite for two reasons. First, since the porous material has already been mentioned in claim 1, the claim should state – in which said porous material--. Second, it has never been positively recited that said topmost section is made of a porous material.

20 Clarification is required.

Applicants have amended claims 1 – 4 herewith to address Examiner's concerns. In addition, Applicants have amended claims 5, 7, 9 and 12 to enhance clarity of these claims.

25 Under "Claim Rejections – 35 U.S.C. 102" of the office action, Examiner quotes 35 U.S.C. § 102(b) and states:

30 Claims 1–4 are rejected under 35 U.S.C. 102(b) as being anticipated by Dahlander (U. S. patent no. 2,036,123).

35 As to claim 1, Dahlander discloses a method of implementing a barrier (3) to fluid flow in at least one direction, said barrier (3) embedded within porous material (concrete 1 and flooring 2 (see page 1, second column, wherein the flooring is anyone of wood, rubber, linoleum, cork or the like) incorporating and emplaced topmost section (2) having a topmost surface suitable for use by wheeled traffic, comprising:

40 applying at least one layer of an adhesive material (4) to an entire first surface of said porous material (1), said applying done to said first surface prior to employing said topmost section;

 placing at least one panel (10) incorporating at least one layer of non-porous material (metal – see page 1, second column, lines 14-26) upon a topmost one of said at least one layers of an adhesive material (4).

 overlapping edges of said panel (10) with edges of any said panels placed adjacent thereto (see Figs. 2, 4 and 5), wherein said panels (10) completely cover said topmost layer of said adhesive material (4):

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establishing a seal between all said overlapped edges (see either Fig. 4 and page 2, first column, lines 7-21 or Fig. 5 and page 2, first column, lines 22-31); and

5 emplacing at least one layer of material (2) comprising said topmost section upon each said panel (10) such that each said panel (10) is confined below said topmost section and above said topmost layer of adhesive (4),

wherein emplacing said panels, establishing a seal between said overlapped edges of said panels, as appropriate, and emplacing said topmost section completes implementation of said barrier (3).

10 The examiner notes that the recitation of an emplaced topmost section having a topmost surface "suitable for wheeled traffic" is a statement of intended use and as such the reference only need be capable of performing such intended use. In the present case, "wheeled traffic" could be anything such as a baby buggy and therefore, it is the examiner's position that Dahlander is capable of performing the intended use.

15 As to claim 2, Dahlander discloses the method of claim 1 as discussed above, and Dahlander also discloses that said barrier (sheet metal layer 3, preferably copper) employs non-porous material selected from the group consisting of: a metal, a metal alloy, a steel alloy, a stainless steel, a composite material, a composite material containing at least some metal, and combinations thereof.

20 As to claim 3, Dahlander discloses the method of claim 1 as discussed above, and Dahlander also discloses that said barrier (3) employs non-porous material (metal, preferably copper) comprising at least in part at least one metal.

25 As to claim 4, Dahlander discloses the method of claim 1 as discussed above and Dahlander also discloses that porous material (concrete 4) encompassing said barrier comprises at least in part concrete.

Applicants have amended Claim 1 upon which Claims 2-4 depend to indicate
30 that the barrier being implemented is "enclosed" by material of the same class above and below the barrier. The Dahlander patent nowhere indicates this alternative. Further, the step of "adhesively" securing the "main outer wall structure" or "main flooring" in Claims 10 and 11 (the method claims) of Dahlander is not included in Applicants' claim 1.

35 For Applicants' invention, the "topmost section" is of the same class of material (as herewith claimed in amended claim 1) as the bottom most section. In a preferred embodiment of Applicants' invention this material is concrete that is poured upon the affixed barrier in a flowable cementitious mix, the material of the "topmost section" requiring no adhesive. (see, for example, p. 7, lines 15-18). In the 40 event Applicants' invention is used with concrete as the class of porous material, a

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monolithic structure is created and, in addition to serving as a moisture barrier, Applicants' barrier serves as reinforcing structure to the monolith, much as a metal screen or rebar does. Further, this reinforcing function occurs near the top of the monolith at the location where it is most helpful to address external stress on the 5 monolith.

Under "Claim Rejections – 35 U.S.C. 103" of the office action, Examiner quotes 35 U.S.C. § 103(a) and states:

10 Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlander (U. S. patent no. 2,036, 123) in view of Bean et al. (U. S. patent no. 6,286,279).

As to claim 5, Dahlander discloses the method of claim 4 as discussed above.

15 Dahlander fails to explicitly disclose that the step of employing said adhesive material comprises at least in part a thin set mortar at a thickness of about 6 mm (0.25 inch).

20 Bean et al. teaches the use of an adhesive layer (18) of a Portland cement-based adhesive to bond a steel foil (12) to concrete (C). Bean et al. does not explicitly discloses (sic) that the adhesive layer is about 6 mm (.24 inch).

25 However, it is well settled that changes in size and/or proportion between the invention and the prior art do not constitute a patentable difference. See *In re Rose*, 220 F. 2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentability distinguish over the prior art). *In re Rinehart*, 531 F. 2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being soaked up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F. 2d at 1053, 189 USPQ at 148.). Further, in *Gardner v. TEC Systems, Inc.*, 725 F. 2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

35 40 Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made of (sic) modify the method of implementing a barrier to fluid of Dahlander by replacing the adhesive of Dahlander with the Portland cement-based adhesive as taught by Bean et al. in order to form a bond between the concrete and metal that does not

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5 degrade in the presence of moisture and alkalinity, and to make the adhesive layer 6 mm (0.25 inches) thick would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made since it is well founded that merely changing dimensions is not unobvious (see *Brunswick Corporation v. Champion Spark Plug Company*, 216 USPQ 1 (CA 7, 1982).

10 Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlander (U. S. patent no. 2,036, 123) in view of Burgess (U. S. patent no. 1,986,999).

15 As to claim 6, Dahlander discloses the method of claim 1 as discussed above.

15 Dahlander fails to explicitly disclose that the step of applying said topmost section is comprised at least in part of concrete at a thickness of about at least 2.5 cm (1.0 inch).

20 Burgess teaches a flooring structure in which corrugated metal plates (11) are overlapped (see at 15, 16 in Fig. 1) and a concrete layer (20) is then emplaced to form the floor surface. Burgess fails to explicitly disclose that the concrete layer is at least 2.5 cm (1.0 inch) thick.

25 However, it is well settled that changes in size and/or proportion between the invention and the prior art do not constitute a patentable difference. See *In re Rose*, 220 F. 2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentability distinguish over the prior art). *In re Rinehart*, 531 F. 2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being soaked up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F. 2d at 1053, 189 USPQ at 148). Further, in *Gardner v. TEC Systems, Inc.*, 725 F. 2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

30 35 40 45 Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made of (sic) modify the method of implementing a barrier to fluid of Dahlander by replacing the flooring material of Dahlander with a concrete layer as taught by Burgess in order to provide a sturdier wear surface, and to make the concrete layer 2.5 cm (1 inch) thick would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made since it is well founded that merely changing dimensions is not unobvious (see

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Brunswick Corporation v. Champion Spark Plug Company, 216 USPQ 1 (CA 7, 1982).

5 Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlander (U. S. patent no. 2,036, 123) in view of Schirmer (U. S. patent no. 4,155,209).

As to claim 7, Dahlander discloses the method of claim 1 as discussed above.

10 Dahlander fails to explicitly disclose that the step of establishing said seal is done at least in part by applying a continuous bead of at least one sealant along the entire length between each said overlapped edge, wherein said sealant remains flexible upon curing.

15 Schirmer discloses a fluid-sealed sheet metal joint wherein the step of establishing said seal is done at least in part by applying a continuous bead of at least one sealant along the entire length between each said overlapped edge, wherein said sealant remains flexible upon curing (see col. 3, liens (sic) 18-49).

20 It would have been obvious to one of ordinary skill in the art at the time the invention was made of (sic) modify the method of implementing a barrier to fluid flow of Dahlander by replacing the sealant of Dahlander with the flexible RTV sealant taught by Schirmer in order to provide a waterproof joint that will remain so even after being subjected to numerous freeze and thaw cycles (see col. 1, lines 16-25).

25 As to claim 8, Dahlander in view of Schirmer discloses the method of claim 7 as discussed above, and Schirmer also discloses that a room temperature vulcanizing (RTV) sealant is employed as said at least one sealant.

30 Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlander (U. S. patent no. 2,036, 123).

As to claim 9, Dahlander discloses the method of claim 1 as discussed above, and Dahlander also discloses that the step of employing at least one panel is comprised of employing at least one plate.

35 Dahlander fails to explicitly disclose that the at least one plate has a total thickness less than about 6 mm (0.25 inch).

40 However, it is well settled that changes in size and/or proportion between the invention and the prior art do not constitute a patentable difference. See *In re Rose*, 220 F. 2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentability distinguish over the prior art). *In re Rinehart*, 531 F. 2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being soaked up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F. 2d at 1053, 189 USPQ at 148.). Further, in

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5 *Gardner v. TEC Systems, Inc.*, 725 F. 2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

10 Therefore, to make the at least one plate have a total thickness less than about 6 mm (.25 inch) would have constituted an obvious expedient to one of ordinary skill in the art at the time the invention was made since it is well founded that merely changing dimensions is not unobvious (see *Brunswick Corporation v. Champion Spark Plug Company*, 216 USPQ 1 (CA 7, 1982).

15 As to claim 12, Dahlander discloses the method of claim 1 as discussed above, and Dahlander also discloses that the step of employing the at least one panel is comprised of employing at least one foil.

20 However, Dahlander fails to explicitly disclose that the at least one foil has a thickness less than about 1 mm (4 mil) (sic, 40 mil).

25 However, it is well settled that changes in size and/or proportion between the invention and the prior art do not constitute a patentable difference. See *In re Rose*, 220 F. 2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentability distinguish over the prior art). *In re Rinehart*, 531 F. 2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being soaked up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F. 2d at 1053, 189 USPQ at 148). Further, in *Gardner v. TEC Systems, Inc.*, 725 F. 2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

35 Therefore, to make the at least one plate (sic, foil) have a total thickness less than about 6 (sic, 1) mm (.25 inch) (sic, (40 mil)) would have constituted an obvious expedient to one of ordinary skill in the art at the time the invention was made since it is well founded that merely changing dimensions is not unobvious (see *Brunswick Corporation v. Champion Spark Plug Company*, 216 USPQ 1 (CA 7, 1982).

40 As noted above, Applicants have herewith amended Claim 1 from which Claims 5-9 and 12 depend, either directly or indirectly. Claim 1 has been distinguished from the cited art by this amendment and thus dependent claims 5-9

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and 12 are also. The Examiner has provided no evidence on motivation to combine any of the cited patents with Dahlander as required by both the MPEP and case law in order to make a *prima facie* case of obviousness.

Prima facie obviousness has not been established. MPEP §706 states that three criteria must be met to establish a *prima facie* case of obviousness:

1. There must be some *suggestion* or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings;
- 10 2. There must be a *reasonable expectation* of success; and
3. The prior art reference must teach or suggest *all* the claim limitations. (emphasis added)

In re Vaeck, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991).

15 Further, MPEP states:

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references."

Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)

To establish a *prima facie* case of obviousness, there must be some motivation to combine references, with a reasonable expectation of success, to teach each and every claimed limitation. MPEP § 2143. To be proper, the asserted combination of references can neither render the prior art unsatisfactory for its intended purpose nor change the principle of operation of a reference. MPEP § 2143.01.

Claim 5 depends from Claim 4 which depends from Claim 1 and therefore incorporates all limitations of Independent Claim 1. As discussed above, *Dahlander* fails to teach each and every element recited in amended Claims 1 or 4. The Examiner does not assert that *Bean* teaches any of the claimed elements missing

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from *Dahlander*, relying on *Bean* only to teach the use of an adhesive of the same type used by Applicants, i.e., a Portland cement-based adhesive. Applicants have amended Claim 1 herewith to indicate the same material is employed in the final top coating as in the underlayment. Nowhere in any of the cited references is this limitation. Accordingly, the asserted combination of references fails to teach each and every limitation of the claimed invention, and therefore cannot properly form the basis of a rejection under 35 U.S.C. § 103.

Additionally, there must exist a basis in the art for combining or modifying references.

10

Obviousness cannot be established by combining the teachings of prior art to produce the claimed invention, *absent some teaching, suggestion or incentive supporting the combination*. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). (emphasis added)

15

A 35 U.S.C. § 103 rejection presumes that differences exist between the subject matter of appellants' claims and those of the prior art. Else a rejection under §102 would apply. Thus, the examiner must cite something in the prior art 20 that suggests in some way a modification of a particular reference or a combination with another reference in order to arrive at the claimed invention. Examiner's reference to *Dahlander* in view of *Bean* does not do this as discussed below.

Although *Cable Elec. Prods. Inc. v. Genmark, Inc.*, 770 F. 2d, 1015, 1025, 226 USPQ 881, 886 (Fed. Cir. 1985) holds that a "suggestion to modify the art to 25 produce the claimed invention need not be expressly stated in one or all of the references to show obviousness," there must be at least some suggestion that can be read "between the lines." This suggestion must be suitable for a person of ordinary skill in the art, at the time the invention was made, to act upon. "Rather, the test is whether the combined teachings of the prior art, taken as a whole" suggest the 30 modifications to the person of ordinary skill in the art. *In re Napier*, 55 F. 3d 610, 34 USPQ 2d 1782 (Fed. Cir. 1995). Should those "skilled in the art" act upon the suggestions given "between the lines" in *Dahlander* in view of *Bean* the logical suggestion would have been to produce Applicants' invention using a different

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material for the top layer, not the same material as is in the underlayment.

Absent such a showing in the prior art, there has been a mere search of the prior art for each of the claimed elements and a "hindsight" combining of same. *In re Vaeck, supra*; *In re Bond*, 910 F. 2d 831, 15 USPQ 2d 1566 (Fed. Cir. 1990); *In re Laskowski*, 871 F. 2d 115, 117, 10 USPQ 2d 1397, 1398 (Fed. Cir. 1989).

Without using the phrase "obvious to try," the Examiner implies that it would be obvious for one to try the approach of Applicants based solely on modifying the *Dahlander* system in view of the *Bean* patent. However, "obvious to try" a modification or combination is not *prima facie* obviousness. This is akin to scientifically looking for the proverbial needle in a haystack. Consider that the references cited by the Examiner, by itself, suggest doing what Applicants have done, which it does not. *In re Clinton*, 527 F. 2d 1226, 1228, 188 USPQ 365, 367 (CCPA 1976). The alleged "suggestion" of *Bean* conveyed no reasonable expectation that a user could intuitively see that the top layer of *Dahlander* would be of the same material as the underlayment.

As to Examiner's rejection of Claim 6 as being unpatentable over *Dahlander* in view of *Burgess*, since Applicants have amended Claim 1 upon which Claim 6 depends *Dahlander* no longer discloses the method of Appellants' Claim 1. The corrugated metal plates of *Burgess* were not adhered to an underlayment of concrete. There is no motivation offered by Examiner to combine *Burgess* with *Dahlander* to yield Applicants' invention. The underlayment of *Burgess* is the corrugated steel, thus there is a structure comprising only two layers, each of a different material.

"Obviousness does not require absolute predictability but a reasonable expectation of success *is* necessary." (emphasis added) *In re Clinton*, 527 F. 2d at 1228, 188 USPQ at 367. See also *Amgen, Inc. v. Chugai Pharmaceutical Co. Ltd.*, 927 F. 2d 1200, 18 USPQ 2d 1016 (Fed. Cir. 1991). Again there was no indication in *Burgess* that anyone of ordinary skill in the art pursuing the approach that led to the *Dahlander* patent would have led to Applicants' reinforced monolithic structure.

All claim limitations of Applicants' application must be considered especially when they are missing from the prior art. A reference was held not to render a

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claimed combination *prima facie* obvious because, *inter alia*, the Examiner ignored a material, claimed temperature limitation that was absent from the reference. With respect to Applicants' system, the limitation of the similar material for underlayment and top coating has been specifically addressed in Applicants' 5 amended Claim 1 from which Claim 6 depends. Specifically, the Federal Circuit has held:

The mere presence [from the reference] of an explicit requirement [of the claim] cannot reasonably be construed as an affirmative statement that the requirement is in the reference.

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In re Evanega, 829 F.2d 1110, 4 USPQ 2d 1249 (Fed. Cir. 1987).

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References are not modifiable if their intended function is destroyed. A 35 U.S.C. § 103 rejection based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, is not proper and the *prima facie* case of obviousness cannot be made. Consider that there is no motivation for engaging in the modification or change to use the same material for a top coating as used for the underlayment. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

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There is no showing by the examiner that the *Dahlander* patent in view of *Burgess* suggests explicitly or implicitly, the use of the same material in the top coating as in the underlayment. *In re Garrett*, 33 BNA PTCJ 43 (November 13, 1986). *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). In *Antonie*, the keystone of non-obviousness, having its nexus in the claimed ratio of tank volume to contactor area of 0.12 gal /ft², was the prior art's un-suggested recognition of the relationship between the result produced and the particular design parameters that dictated the ratio. It is clear that the *Dahlander* patent in view of *Burgess* does not suggest that similar materials be used for the underlayment and topcoating.

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Nowhere in Examiner's justification for rejection under § 103(a) is there evidence of a teaching, suggestion or incentive from *Dahlander* in view of *Burgess* to accomplish what an embodiment of Applicants' invention accomplishes *intuitively*. For example, in acknowledging the operation of Applicants' invention, one is struck with the awareness that the resulting monolith of Applicants' invention permits

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heavy wheeled traffic to traverse floors comprising Applicants' invention whereas the same can not be said of floors made using the *Dahlander* patent and there is no motivation shown to combine the *Burgess* patent with the *Dahlander* patent.

Prior art does not teach the problem or its source. One "problem" addressed in embodiments of Applicants' invention is the impact of heavy wheeled traffic on traditional floor covering. *Burgess* is introduced for the sole purpose of establishing the obviousness of using an alternative to *Dahlander's* construction materials that would have been obvious to one skilled in the art at the time the invention was made. However, one skilled in the art at the time the invention was made would have had to have in mind the problem of employing a finish surface to a concrete underlayment to have the necessary motivation to employ the separate deep channel corrugated metal of *Burgess*. *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45 (1923) established the rule that the *discovery of the source of a problem* may result in a patentable invention despite the fact that the solution would have been obvious *once the source of the problem was discovered*.

One element of Applicants' invention relates to the discovery of the *source of a problem*, i.e., providing a durable top surface for wheeled vehicles to traverse a floor of underlying concrete, and the discovery leading to a patentable solution to that problem. The *source of the problem* is not taught or suggested by the cited prior art, alone or in combination, thus a *prima facie* case of obviousness is not made. See also, *In re Sponnoble*, 405 F.2d 578, 160 USPQ 237 (CCPA 1969) where the court held that the patentable advance was the *discovery of the source of the problem*. Because the *source of the problem* was not suggested by the evidence put forward by the Examiner, the court reversed the USPTO decision.

Further, where the advance in the art lies in the discovery of a problem or a source of a problem, the examiner must provide evidence that one skilled in the art at the time of the invention would have expected a problem to exist. *In re Nomiya*, 509 F.2d 566, 572, 184 USPQ 607, 612 (CCPA 1975).

The evidence relied upon falls short of establishing *prima facie* obviousness of the claimed invention. In light of the teachings of *Dahlander* in view of *Burgess*, no

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more than an "obvious to try" standard has been met. *In re Geiger*, 815 F.2d at 688, 2 USPQ 2d at 1278 (Fed. Cir. 1987).

As to Claims 7 and 8, Claim 8 being dependent on Claim 7 amended herewith and Claim 7 being dependent on Claim 1 amended herewith, Applicants' arguments as above apply here also. Since Claim 1 has been amended herewith, *Dahlander* no longer discloses the method of Applicants' Claim 1. Since all of the limitations of *Dahlander* are not met in Applicants' Claim 1 and Claims 7 and 8 depend from Claim 1, the 35 U.S.C § 103 rejection of *Dahlander* in view of *Schirmer* is inappropriate. *Schirmer* is cited for applying a sealant between overlapping edges of a sheet metal joint but there is no motivation or suggestion provided by Examiner for combining *Schirmer* with *Dahlander* to effect Applicants' invention since *Schirmer* would have had to provide the limitations missing from Applicants' Claim 1 as amended herewith.

As to Claims 9 and 12, both being dependent on Claim 1 amended herewith, Applicants' arguments as above apply here also. Since Claim 1 has been amended herewith, *Dahlander* no longer discloses the method of Applicants' Claim 1. Since all of the limitations of *Dahlander* are not met in Applicants' Claim 1 and Claims 9 and 12 depend from Claim 1, the 35 U.S.C § 103 rejection of *Dahlander* is inappropriate.

Under "Conclusions" of the office action, Examiner states:

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Of interest are U. S. patent no. 5,546,719 to Maiers et al. which discloses a waterproof decking method and apparatus, U. S. patent no. 5,052,161 to Whitacre which discloses a tile application structure, U. S. patent no. 3,900,102 to Hurst which discloses waterproofing means and method, U. S. patent no. 5,286,318 to Sims et al. which discloses a method of forming EMI shielding enclosures, and U. S. patent no. 5,137,764 to Doyle et al. which discloses a floor structure incorporating a vapor and gas barrier.

Applicants note prior art made of record with no comment at this time.

No new matter has been entered via this amendment. In view of the foregoing, Applicants respectfully request that the subject application be passed to issue as amended hereby with amended Claims 1–5, 7, 9 and 12, and original claims 6 and 8.

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Respectfully Submitted,

By: 

EARL H. BAUGHER, JR
Attorney for Applicants
Registration No. 40,905

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U.S. Army Corps of Engineers
Humphreys Engineer Center
CEHEC-OC (Kingman Bldg.)
7701 Telegraph Rd.
10 Alexandria, VA 22315-3860
505 342-3360